

# Notice of Allowability

Application No.

09/753,065

Examiner

Lan Vinh

Applicant(s)

JANG ET AL.

Art Unit

1765

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment and remarks filed on 12/5/2003.
2. ☒ The allowed claim(s) is/are 1-8 and 10.
3. ☒ The drawings filed on 29 December 2000 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☒ Certified copies of the priority documents have been received in Application No. 09/753,065.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

Lan Vinh  
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***Allowable Subject Matter***

1. Claims 1-8, 10 are allowed.

The following is an examiner's statement of reasons for allowance:

Regarding claims 1, 8, the applicants have presented a persuasive argument (page 6 of the applicant's remarks) that the cited prior art of record fails to disclose or suggest a method for releasing a microstructure comprises the step of performing a vapor etching by controlling a temperature and a pressure to be within the vapor region of a phase equilibrium diagram of water/ removing the silicon oxide of a sacrificial layer by performing a vapor etching using anhydrous HF and alcohol by controlling a temperature and a pressure to be within the vapor region of a phase equilibrium diagram of water, whereby the vapor etching is performed under a total pressure of an etching chamber ranged from about 25 Torr to about 75 Torr and a temperature of a substrate ranged from about 25<sup>0</sup>C to about 75<sup>0</sup> C. The closest cited prior art of Grant et al (US 5,439,553) discloses the vapor etching is performed under the partial pressures of HF, Methanol and water ranging from about 1 Torr to above about 100 Torr in an etching chamber and a temperature of a substrate ranged from about 20<sup>0</sup>C to about 95<sup>0</sup> C (Fig. 1). As seen in Fig. 1, since the partial pressures of HF is already above 100 Torr, of methanol is about 100 Torr in the etching chamber while the temperature of a substrate ranged from about 20<sup>0</sup>C to about 95<sup>0</sup>, one skilled in the art would not have found it obvious to modify Grant partial pressures of HF, Methanol and water to produce the claimed total pressure of about 25 Torr to about 75 Torr and a temperature of a substrate ranged from about 25<sup>0</sup>C to about 75<sup>0</sup> C.

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### **Conclusion**

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lan Vinh whose telephone number is 571 272 1471. The examiner can normally be reached on M-F 8:30-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nadine Norton can be reached on 571 272 1465. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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February 5, 2004